



The National Map - Missouri Pilot Project

The Nation Needs *The National Map*

Governments depend on a common set of geographic base information as a tool for economic and community development, land and natural resource management, and health and safety services. Emergency management and defense operations rely on this information. Private industry, nongovernmental organizations, and individual citizens use the same geographic data. Geographic information underpins an increasingly large part of the Nation's economy.

Available geographic data often have the following problems:

They do not align with each other because layers are frequently created or revised separately,

They do not match across administrative boundaries because each producing organization uses different methods and standards, and

They are not up to date because of the complexity and cost of revision.

The U.S. Geological Survey (USGS) is developing *The National Map* to be a seamless, continuously maintained, and nationally consistent set of online, public domain, geographic base information to address these issues. *The National Map* will serve as a foundation for integrating, sharing, and using other data easily and consistently.

In collaboration with other government agencies, the private sector, academia, and volunteer groups, the USGS will coordinate, integrate, and, where needed, produce and maintain base geographic data.

The National Map will include digital orthorectified imagery; elevation data;

vector data for hydrography, transportation, boundary, and structure features; geographic names; and land cover information. The data will be the source of revised paper topographic maps.

Many technical and institutional issues must be resolved as *The National Map* is implemented. To begin the refinement of this new paradigm, pilot projects are being designed to identify and investigate these issues. The pilots are the foundation upon which future partnerships for data sharing and maintenance will be built.

The Missouri Pilot Project

Managers in both the public and private sectors need access to USGS data in order to plan and respond effectively when communities are threatened or affected by a hazard or disaster. Current, accurate, consistent, and readily available base geographic data are crucial in reducing injuries, saving lives, and protecting critical infrastructure and are the backbone for mitigation, response, and recovery.

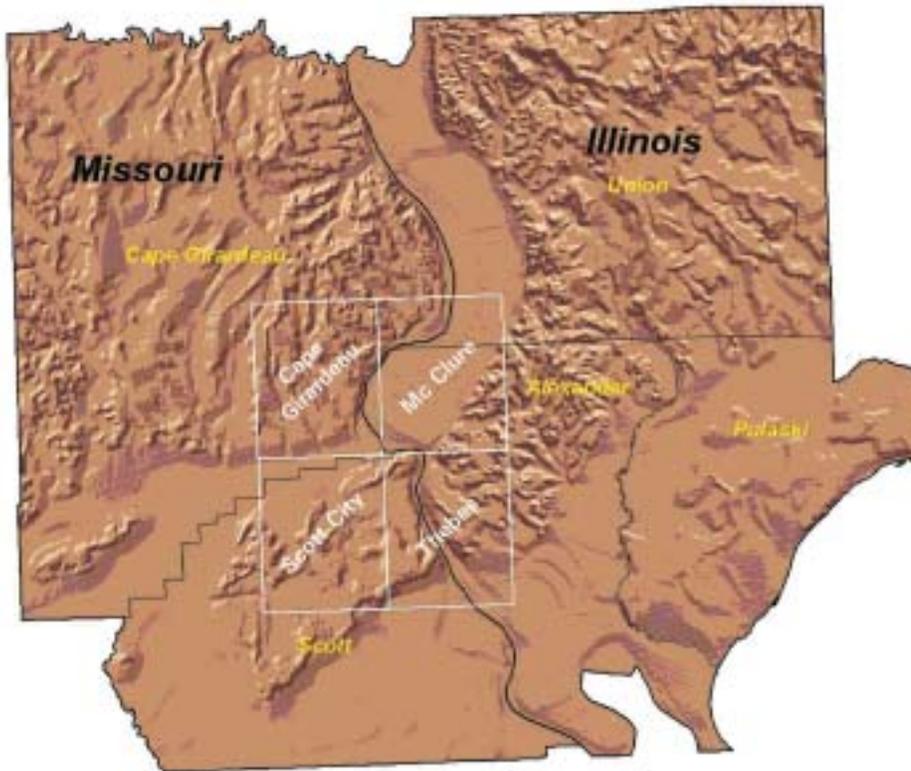
The National Map Missouri pilot is a collaborative effort between the USGS Cooperative Topographic Mapping Program and National Cooperative Geologic Mapping Program to provide geospatial and geologic data to support multihazards risk assessment, mitigation, and emergency planning in the Cape Girardeau community in southeast Missouri. The City of Cape Girardeau is located within the New Madrid seismic zone and is designated as a Project Impact community by the Federal Emergency Management Agency. The primary objective of the Missouri pilot is to collaborate on the integration of geologic data with updated data themes from *The National Map* in the pilot area and to investigate methods to disseminate geospatial and geologic data in electronic formats over the Internet to

scientists, managers, government policymakers, emergency planners, and the general public. These data will allow managers to evaluate options and make informed management and policy decisions. In conjunction with computer technologies, these data will provide managers with the capability to develop strategies and evaluate operational and emergency scenarios that help reduce the human safety and economic risks associated with both human-induced and natural disasters and hazards.

The City of Cape Girardeau is of significant interest to several organizations within the central United States and is a focal point of ongoing projects with the Missouri State Emergency Management Agency, Missouri Department of Transportation, Missouri Geological Survey, Central U.S. Earthquake Consortium, Center for Earthquake Research and Information, and USGS. Seismic activity, flooding, and other natural disaster applications in the Cape Girardeau area would be supported by *The National Map* data themes through this pilot. The pilot will initially focus on four 7.5-minute quadrangles that are part of an ongoing National Cooperative Geologic Mapping Program effort. During *The National Map* pilot phase, new mapping techniques will be investigated and the best available geospatial data will be acquired or collected for all data themes identified as part of *The National Map*. Other data will be included where appropriate so that all relevant data will be available through one Internet portal, thus minimizing the level of effort normally associated with the data collection activities required for research, planning, and response.

The Cape Girardeau pilot goals are:

- Promote *The National Map* vision and Cooperative Topographic Mapping Program.



Digital elevation data rendered as a shaded relief map with State and county boundaries with the outline of the four quadrangles that are in the pilot area.

- Increase public awareness of USGS geospatial and geologic data and their applicability to support requirements for geologic and seismic hazard mapping, decision support systems, and risk assessment and management models.
- Increase the public's understanding of the USGS capacity and capabilities to address hazard and disaster issues.
- Build partnerships with local, county, State, and other Federal agencies and groups to incorporate the best available data within the Cape Girardeau area into the pilot project.
- Provide broader access to currently available USGS geospatial data through the Internet.
- Increase Web-based mapping capabilities.

More Information About *The National Map*

We welcome your comments on *The National Map* mission and strategies. You can view and download the full report at nationalmap.usgs.gov. Please share your thoughts about the vision with the USGS by e-mail at nationalmap@usgs.gov or by mail to USGS-National Map, MS 511 National Center, 12201 Sunrise Valley Drive, Reston, VA 20192.

More Information About The Missouri Pilot Project

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